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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Oliver Morgan

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EXAMINER

LIANG, GWEN

ART UNIT

PAPER NUMBER

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/013,097	Applicant(s) MORGAN ET AL.	
	Examiner Giovanna Colan	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2006.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-12 is/are rejected.
 7) ☐ Claim(s) _____ is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>05/25/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to communications through the applicant's amendment, and Request for Continued Examination (RCE) filed on 5/25/2006.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-3, 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding independent claims 1 and 7, the claimed subject matter "using the evolved property definition" in the last two lines of the last limitation renders the claims indefinite because it is unclear whether the clause "using the evolved property definition" is describing "the first implementation" or "redirecting accesses" or something else.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6 and 10-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding independent claims 1 and 4, the claimed subject matter, a system, does not contain a computer component (hardware). All the means plus functions as claimed are software per se. Without functional relationship between the claimed functions and any computer component, the system as claimed is not capable of producing tangible results and therefore not statutory.

Regarding independent claim 10, the claimed step of "specifying a synthesized property definition" is a mere compilation or arrangement of data thereon, which, even if being maintained by the claimed "maintaining" step, cannot provide the required practical application as claimed.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Nguyen et al., "Nguyen" (U.S. Patent No. 6,119,130).

With respect to claim 1, Nguyen discloses a system ...comprising:

means for specifying an evolved property definition, for each object having a property in the first implementation that is different from a corresponding property of a corresponding object in the second implementation (See for example: col. 2 lines 56-58,

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"A mechanism is also provided for converting the data from the stored format to the expected format when the two formats do not match."),

wherein the evolved property definition is added as a property of the object in the metadata schema in the data file (See for example: col. 5, lines 9-15, "Numerous applications 180 may access, update, and store data 188 through the data retrieval/update unit 182. The data retrieval/update unit 182 contains a data format conversion unit 184 for converting requested data from one format to another when the format expected by the requesting application (the "target format") does not match the format in which the data is actually stored (the "stored format"); col. 6, line 66 – col. 7, lines 21, "The present invention includes a mechanism for tracking the formats associated with schema versions, and for providing the appropriate format information to the data format conversion unit 184. According to one embodiment of the invention, the data format information 194 includes all of the information for converting data between schema versions. Specifically, data format information 194 includes a schema version record for each version of each data type used to store data 188. For example, if data 188 includes an instance that was stored according to the format of a "type1" data type, then data format information 194 would include format information for all versions of the type1 data type. The schema version record for a particular schema version includes format data that describes all of the properties of the schema version, including the attributes in the schema version and the type of data that is stored in each of the attributes. When a new version of a data type is created, a new schema version record is added to the data format information 194. The new schema version record

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includes format data that describes all of the attributes of the new version of the data type. The new schema version record is then associated with the existing schema version records that correspond to other versions of the same data type"; col. 8, lines 4-28, "As a **data type evolves from one version to the next, attributes may be added, deleted, or changed.** To accurately convert data between versions of a data type, a mechanism must be provided to indicate the correlation between a particular attribute and any corresponding attribute that appears in other versions of the same data type. According to one embodiment of the invention, the correlation between attributes of different versions is tracked by assigning each attribute a unique attribute identifier. When a new version of the data type is created, newly added attributes are assigned new attribute identifiers. However, existing attributes that have simply been modified in the new version of the data type maintain their attribute identifiers. For example, assume that the attributes "Type" and "Size" of the data type ENGINE1 have attribute identifiers 100 and 102, respectively. Assume also that in version 2 of the ENGINE data type the name of the "Type" attribute is changed to "Model", and a new attribute "Weight" is added. The new attribute "Weight" will be assigned a new unique attribute identifier. The Size attribute, which remains unchanged, will continue to have the attribute identifier 102. Because the "Model" attribute is a modification of the "Type" attribute, the "Model" attribute will have the same attribute identifier (i.e. 100) as the "Type" attribute"; col. 10, lines 30-60, "When the expected format and the stored format do not match, then the data contained in an instance must be converted from the stored format to the target format before the data is supplied to the requesting application.

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According to one embodiment of the invention, data format conversion unit 184 performs the conversion process by **creating a target instance that corresponds to the stored instance**, but in which **the data is stored in the target format....** For attributes that are present in both the target and stored formats, but that have been changed, conversion operations are performed to convert the data from the stored format to the target format. For example, if the target format specifies that an attribute holds a fixed point decimal value and the stored format specifies that the same attribute holds an integer, then **the integer that is stored in the attribute in the stored format is converted to a fixed point decimal value and stored in the target instance of the object");** and

means for redirecting accesses to a property in the first implementation using the evolved property definition to access the corresponding property in the data stored in the in the second implementation (See for example: col. 2 lines 38-43, wherein the means for redirecting accesses is inherent since the motivation of Nguyen is to provide a method and apparatus that allows software to access data even when the format of the data is based on a different schema version than the schema version supported and expected by the software; col. 2 line 46-48, "A method and apparatus that allow schema evolution to occur without requiring applications that expect older schemas to be recompiled is provided.", wherein means for redirecting accesses is also inherent; col. 53-58, wherein the evolved property definition being used to redirect access is inherent because the mechanism provided for converting the data from the stored format to the

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expected format corresponds to the claimed “evolved property definition”, as defined in the applicant’s specification page 7 lines 8-9).

Claim 2 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Nguyen discloses a system wherein the evolved property definition includes a reference to stored instructions for deriving a property in the first implementation from data stored in the second implementation (See for example: col. 2 lines 53-58; Fig. 1b “DATA FORMAT CONVERSION UNIT” and “STORED VERSION INFORMATION”).

Claim 3 is rejected for the reasons set forth hereinabove for claim 1 and furthermore Nguyen discloses a system wherein the means for specifying comprises:

means for accessing stored information describing the first implementation of the metadata schema and the second implementation of the metadata schema (See for example: col. 4 lines 61-66); and

means for determining a difference between the first implementation of the metadata schema and the second implementation of the metadata schema (See for example: col. 10 lines 30-60).

With respect to claim 4, Nguyen discloses a system ...comprising:

means for specifying a synthesized property definition for each object having a property in the first implementation for which a corresponding object in the second implementation lacks a corresponding property (See for example: col. 10 lines 46-51, “For attributes that are present in the stored format that do not exist in the target format, no data is placed in the target instance. For attributes that are not present in the stored

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format but are present in the target format, user-defined default values or NULL values are stored in the target instance of the object. For example, a NULL string may be placed in the target instance for a string attribute that exists in the target format but not in the stored format.”), wherein the synthesized property definition is added as a property of the object in the metadata schema in the data file (In the example above, the user-defined default values demonstrates that synthesized property has been added to the target object to accept the user-defined default values, and also refer to the reasoning stated in claim 1 for the limitation wherein the property definition is added as a property of the object); and

means for maintaining information about accesses to the synthesized property definition (See for example: col. 5, lines 25-36, “According to one embodiment, the expected version of requested data is determined by the expected version determination unit 190 based on expected version information 186. The stored version of requested data is determined by the stored version determination unit 196 based on stored version information 198 stored with the data 188. The data format determination unit 192 determines the formats associated with the stored and expected schema versions based on data format information 194 maintained by the data format determination unit 192”; Figure 5, elements 520, 522).

Claim 5 is rejected for the reasons set forth hereinabove for claim 4 and furthermore Nguyen discloses a system wherein the synthesized property definition includes a reference to stored instructions for deriving a property in the first

implementation from data stored in the second implementation (See for example: col. 2 lines 53-58; Fig. 1b "DATA FORMAT CONVERSION UNIT").

Claim 6 is rejected for the reasons set forth hereinabove for claim 4 and furthermore Nguyen discloses a system wherein the means for specifying comprises:

means for accessing stored information describing the first implementation of the metadata schema and the second implementation of the metadata schema (See for example: col. 4 lines 61-66);

means for determining a difference between the first implementation of the metadata schema and the second implementation of the metadata schema (See for example: col. 10 lines 30-33).

Claims 7-9 are rejected on grounds corresponding to the reasons given above for claims 1-3.

Claims 10-12 are rejected on grounds corresponding to the reasons given above for claims 4-6.

Response to Arguments

7. Applicant's arguments regarding the assertions made in the Final Office Action mailed on 11/22/2005 have been fully considered but they are not persuasive.

In response to applicant's arguments, the recitation "the data stored using the second implementation includes a data file comprising data describing media essence, data describing metadata objects that reference the media essence and data describing

the second implementation of the metadata schema" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (for example, "making any modifications to a metadata schema in the data file that contains the data in the second application that is being used by the first application") are not recited in Claim 1. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Accordingly the rejection of all pending claims is maintained.


Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GWEN LIANG whose telephone number is 571-272-4038. The examiner can normally be reached on 9:30 A.M. - 5:30 P.M. Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOHN BREENE can be reached on 571-272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

4 August 2006
G.L.


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